Need Cable Glands? Buy Explosion Proof Cable Glands Now

Explosion proof cable glands are essential components used in hazardous environments to safely terminate and seal cables entering electrical enclosures. They are specifically designed to prevent any internal sparks or flames from escaping the equipment and igniting the surrounding atmosphere.

Industries such as oil & gas, petrochemicals, mining, and marine rely heavily on certified flameproof cable glands to maintain safety and meet compliance standards. These glands ensure reliable performance in areas where flammable gases, vapors, or dust are present.

In this article, we'll explore the function, types, certifications, pricing, and applications of explosion proof cable glands, including commonly used options like the double compression cable gland.

What is an Explosion Proof Cable Gland?

An explosion proof cable gland is a mechanical device used to securely connect cables to electrical equipment in hazardous areas. Its primary function is to prevent the ignition of flammable gases or dust by containing any internal sparks or flames within the equipment enclosure.

These cable glands are designed to maintain the integrity of flameproof enclosures by forming a tight seal around the cable. This helps stop explosive atmospheres from entering or escaping through the cable entry points.

Explosion proof cable glands are manufactured to meet strict international standards like ATEX, IECEx, and IS/IEC 60079, ensuring they are safe for use in Zone 1, Zone 2, and other high-risk classified areas.

They are commonly used in:\n- Motors and control panels\n- Junction boxes\n- Distribution boards\n- Lighting systems

Whether it's gas, vapor, or dust, these glands act as the first line of defense in environments that demand high safety and compliance.

Difference Between Flameproof and Explosion Proof Cable Gland

Aspect	Flameproof Cable Gland	Explosion Proof Cable Gland
Standard Followed	IEC 60079-1 (Ex d)	NEC / CEC (National/Canadian Electrical Code)
Common Regions	Europe, Asia, Middle East, Africa	North America (USA, Canada), Asia
Hazardous Area Zones	Zone 1, Zone 2	Class I, Division 1 & Division 2
Functionality	Contains internal explosion and prevents it from escaping	Same functionality but defined under NEC classifications
Labeling	Ex d (Flameproof)	Explosion Proof (Class/Div labeling)
Usage Environments	Refineries, Petrochemical Plants, Offshore Rigs	Oil Rigs, Chemical Plants, Gas Stations in North America

Global Compatibility	**Used internationally and widely accepted**	**Region-specific, especially for US and Canadian compliance**

Both serve the same core purpose ensuring cable entry safety in explosive environments, but differ in terminology and compliance standards.

Types of Explosion Proof Cable Glands

Explosion proof cable glands are available in different designs based on cable type, application environment, and required level of protection. Choosing the right type ensures both mechanical safety and compliance in hazardous locations.

Single Compression Cable Gland

- **Designed for non-armoured cables**
- **Provides a single seal at the cable's outer sheath**
- **Suitable for indoor or less hazardous environments**
- **Typically used where internal cable pressure and environmental exposure are minimal**
- **Cost-effective but not recommended for Zone 1 or heavy-duty applications**

Double Compression Cable Gland

- **Designed for armoured cables**
- **Provides sealing at both inner and outer sheath**
- **Offers better strain relief and ingress protection**
- **Preferred for Zone 1 and Zone 2 installations**
- **Ideal for use in outdoor, industrial, and high-vibration environments**

Barrier Type Cable Gland

- **Used in environments where gas migration must be completely blocked**
- **Includes a resin or compound barrier to seal the cable core**
- **Mandatory for certain ATEX/IECEx classified areas**
- **Prevents internal gases from passing through the cable into safe zones**
- **Commonly used in offshore and high-risk petrochemical facilities**

Threaded Cable Glands (Metric, PG, NPT)

- **Available in various thread types for different equipment and regional standards**
- **Metric & PG threads are common in Europe and Asia**
- **NPT threads are widely used in North America**
- **Thread compatibility ensures secure installation and leak-proof protection**

Required Certifications for Cable Glands Explosion Proof

Explosion proof cable glands used in hazardous environments must comply with international safety standards such as ATEX, IECEx, ISI (Indian Standards), and Ingress Protection ratings (IP66/IP67/IP68). These certifications ensure that the glands can safely contain internal explosions, block flammable gases or dust from entering the equipment, and perform reliably under extreme conditions.

Exgrip manufactures cable glands that are fully certified and tested to meet these global requirements, making them suitable for use in Zone 1, Zone 2, and other high-risk classified areas.

Looking for Reliable Explosion Proof Cable Glands?

If you're exploring options for explosion proof cable glands, whether for a new setup or ongoing requirement, it's important to choose certified, reliable components built for safety and performance.

At Exgrip, we offer a full range of flameproof cable glands, double compression cable glands, and accessories, all tested and certified for hazardous environments.

Talk to our technical team today at Exgrip.com
Or call us directly for quick assistance!